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Alternative Delivery Mode as a Support Mechanism in Emergencies: An Evaluation of Its Effectiveness

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ABSTRACT

The study used a quantitative method with a descriptive-comparative research design through survey methodology. The study population consisted of 150 Grade 10 learners and 105 teachers who were selected using simple random sampling. Data was gathered using a structured questionnaire and analyzed using weighted mean and independent samples t-test to determine the level of effectiveness of Alternative Delivery Mode (ADM) and to determine the differences in perceptions between learners and teachers. The results showed that ADM was perceived as highly effective in terms of teachers' adaptation, delivery of instruction, accessibility of learning materials, and learning assessment, while learners' adaptation was rated as moderately effective. Statistical analysis showed a significant difference between learners' and teachers' perceptions regarding ADM effectiveness. The challenges identified included are limited internet connectivity, delayed submission of outputs, monitoring difficulties, and increased teacher workload. The study finds that while ADM is a useful tool for keeping education going during emergencies, it really needs ongoing improvements, stronger institutional backing, and better support systems for learners to make sure it remains effective and sustainable in the long run.

Keywords: *Alternative Delivery Mode (ADM), learners' adaptation, teachers' adaptation, delivery of instruction and accessibility of materials*

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INTRODUCTION

Emergencies such as pandemics, natural disasters, and other unexpected crises pose serious disruptions to the continuity of education. The COVID-19 pandemic, in particular, profoundly altered the lives and routines of people worldwide and exposed the vulnerability of educational systems to large-scale emergencies. School closures implemented to curb the spread of the virus resulted in significant learning interruptions, affecting millions of learners and educators across the globe.

At the height of the pandemic, approximately 192 countries implemented nationwide school closures, leaving about 91.4% of enrolled learners temporarily out of school (UNESCO, 2020). In response, international organizations recommended the adoption of flexible learning strategies to ensure the continuity of education while safeguarding public health. One of the most notable responses was the utilization of Alternative Delivery Modes (ADM), which include modular learning, online learning, blended learning, and other non-face-to-face instructional approaches designed to address diverse learner needs during emergencies.

In the Philippines, as a member of the United Nations and a signatory to the Sustainable Development Goals—particularly Goal 4 on inclusive and equitable quality education—the Department of Education implemented ADM as a key support mechanism during emergencies. Through ADM, learning delivery continued despite the suspension of face-to-face classes, ensuring that education remained accessible even in times of crisis.

This study aims to evaluate the effectiveness of Alternative Delivery Modes as a support mechanism during emergencies in selected schools in the Division of Valenzuela. Specifically, it seeks to determine the extent to which ADM supports teaching and learning continuity and to identify the challenges encountered by teachers and learners in its implementation. The findings of the study intend to provide insights that may help strengthen ADM policies and practices, ensuring educational resilience in future emergency situations.

Research Gaps

While the Department of Education (DepEd) proposed a comprehensive implementation of distance learning through modular, online, and TV/radio-based instruction during emergencies, significant research gaps and practical downsides exist, particularly in the public sector. A primary gap is the disparity in resources and facilities compared to private institutions, which has led to uneven educational quality. Furthermore, survey data from the SEQuRE movement highlights a substantial performance gap, revealing that between 66% and 86.7% of students believe they "learned less" under distance learning modalities compared to traditional face-to-face setups. The researchers identify several specific issues that contribute to these gaps, including: Technological Inequality, Instructional Limitations, and Home Environment Challenges: Consequently, the study seeks to address these deficiencies by determining the level of effectiveness of alternative distance learning.

Theoretical Framework

Many people are learning through traditional mode of teaching being in person or in classrooms, however, on the other hand, the combination of face-to-face and online teaching as a special form of learning is called “blended” learning. To avoid face-to-face interactions, the Department of Education offers blended and distance learning modalities by using printed or digital modules, online learning resources, and radio and TV-based instructions during emergencies and suspension of classes.

Thus, the "community of inquiry" model for online learning environments developed by Garrison et al. (2001) is relative to this study, since it states that their model supports the design of online and blended courses as active learning environments or communities dependent on instructors and students sharing ideas, information, and opinions. On a particular note, "presence" is a social phenomenon and manifests itself through interactions among students and instructors. The community of inquiry has become one of the more popular models for online and blended courses that are designed to be highly interactive among students and faculty using discussion boards, blogs, wikis, and videoconferencing.

The theory supported the study and interconnected with the title and directs the researchers to provide concepts to the study. The theory stated provides a basis on how learners could adapt and acquire learning in the new normal.

Objectives

The following objectives were formulated to guide this research study:

1. To determine the extent of the effectiveness of distance learning as perceived by learner and teacher respondents in terms of:
   1.1 Learners' adaptation;
   1.2 Teachers' adaptation;
   1.3 Delivery of instruction;
   1.4 Accessibility of learning materials; and
   1.5 Learning assessment.
2. To ascertain if there is a significant difference between the perceptions of the two groups of respondents regarding the effectiveness of distance learning in the new normal.
3. To identify the challenges faced by both learners and teachers in the implementation of alternative distance learning during emergencies.

METHODOLOGY

Research Design

With the aim to provide a deeper analysis of the effectiveness of alternative distance learning during emergencies, this study used a quantitative research method as primary approach, supplemented with qualitative and documentary data. Through methodological triangulation, the researchers utilized qualitative structured interviews and documentary analysis to strengthen and validate the quantitative findings. The quantitative method enabled the researchers to deliberately gather numerical data on teachers' and students' perceptions.

Furthermore, a descriptive-correlational research design was used in the study. While the correlational component examined whether there had been any significant differences between the two groups' perceptions, the descriptive component aimed to determine how effective alternative distant learning was as seen by learners and teachers. Although it enabled the researchers to describe current circumstances and investigate correlations between variables without manipulating them, this design proved to be acceptable.

Both primary and secondary data were required for the study. surveys and structured interviews were used to collect primary data directly from students and teachers. Documentary research of pertinent school records and official documents pertaining to the application of alternative distant learning was used to gather secondary data.

Participants and Sampling

The study involved 255 respondents, in which one hundred and fifty (150) learners and one hundred and five (105) teachers from selected public secondary schools were asked to fill out a questionnaire about the effectiveness of alternative distance learning during emergencies in their respective schools. To support the respondents' ratings, a structured interview was conducted, and relevant documents were analyzed. The researchers used simple random sampling to select the sample. The researchers made use of electronic selection app to randomly select the target participants of the study – both the learners and the teachers. Inclusion criteria required learners to be officially enrolled in Grade 10 and actively engaged in ADL, while teachers must have been directly involved in ADL implementation.

Instrument

To gather pertinent data, the researchers used the research questionnaire that has been adapted and has made some modifications of parts of the research questionnaire in accordance with the purpose of the researchers' study. Formal permission to use and adapt the instrument was obtained from the original author to ensure ethical compliance and proper acknowledgment. The questionnaire includes interview questions which were answered/evaluated through Likert Scale to easily quantify the respondents' perceptions on the extent of the effectivity of alternative distance learning and the challenges encountered during implementation.

The instrument had a 5-point Likert scale with six domains including: adaptation of learners, adaptation of teachers, delivery instruction, accessibility on learning materials, learning assessment and challenges in implementation.

The original instrument has been validated but it was revalidated after being revised for the context of Alternative Distance Learning during emergencies. Expert review established content validity, leading to revisions as appropriate. Finally, reliability was evaluated with a pilot test using Cronbach's alpha.

Data Gathering Procedure

The researchers sent a letter requesting permission to conduct the study to the Office of the Schools Division Superintendent of DepEd Valenzuela which was presented to the School Heads of the identified school respondents. Respondents were given adequate time to read and understand each question carefully. The researchers utilized all data gathering online given the situation and allowed respondents to fill out the questionnaire at their own convenience.

Thereafter, data collection was initiated through requests to the Schools Division Superintendent and school administrators. Permission to use and modify the research instrument was also obtained from the original author before it was administered.

An electronic distribution of the validated questionnaire was given to the selected participants. Participation was voluntary, with an online informed consent process prior to participation, and respondents were allowed enough time in their own setting to complete the survey.

Data Analysis Procedure

Data was analyzed using descriptive statistics. Weighted Mean was utilized to determine the level of learners and teachers' perception. T-Test was used to determine the significant difference between the perception of the two groups and Average (Mean) for general analysis.

Data was collected through a questionnaire adapted from a previously validated tool designed to measure the effectiveness of distance learning. Before using it, formal permission was obtained from the original author to ensure everything was done ethically and to properly acknowledge their intellectual property.

Although the original tool had already been validated, additional validity and reliability testing became necessary and modified it to better fit the context of Alternative Distance Learning during emergencies.

Ethical Consideration

The researchers have considered some of the ethical issues while conducting the study. Such considerations include keeping all the personal details of the respondents confidential. A consent form was given, the school authority and the respondents were assured to be well informed about the research to be conducted, and they have the freedom to withdraw any time from the research and have their own will to participate. The researchers were confident that all the respondents agreed willingly to participate fully in the conduct of the research study.

RESULTS

This section presents the results of the study. Tables 1 to 5 summarize the perceived effectiveness of Alternative Distance Learning (ADL) determined using the responses from both learners and teachers on each of the domains identified. The results concerning significant differences between the perceptions of both groups are also presented in Table 6 (independent-samples t-test). The problems faced by learners and teachers in the use of ADL are summarized in Tables 7 and 8.

The results in the tables and the results of studies done over the last five years are used to understand the results so that the analysis is clear and consistent. The results will be compared to the existing knowledge about distance learning and other modes of learning to find similarities and differences. In this way, it would be easier to see how the research fits with what is already known and what it adds to the ongoing discussion, ultimately showing its relevance in the current situation.

Table 1

Learners' Adaptation

		LEARNERS		TEACHERS	
No.	**Indicators**	**Mean**	**Verbal Description**	**Mean**	**Verbal Description**
1	Learners have access to stable internet connectivity at home during online sessions.	3.33	Moderate Extent	3.00	Moderate Extent
2	Learners have easy access to gadgets such as smartphones, tablets, laptops and the like.	3.46	Moderate Extent	2.60	Moderate Extent

3	Learners have technological skills and able to adjust easily in the new normal set-up.	3.14	Moderate Extent	2.86	Moderate Extent
4	Learners can do and complete online and module tasks independently.	3.57	High Extent	2.58	Moderate Extent
5	Learners was able to improve flexibility and self-discipline, through distance learning.	3.71	High Extent	2.52	Moderate Extent
	OVERALL WEIGHTED MEAN	**3.44**	**Moderate Extent**	**2.71**	**Moderate Extent**

Table 1 reveals that distance learning effectiveness regarding learners' adaptation is perceived as a "Moderate Extent" by both groups. The learners' scores mostly fell between 2.50 – 3.49, while the teachers' scores ranged from 2.58 to 3.00, suggesting adaptability is quite average. Although the general weighted average means (3.44 for teachers and 2.71 for learners) show improvements in flexibility and self-discipline, the overall moderate adaptation poses a risk.

Supporting research links successful adjustment to academic achievement; however, if effectiveness remains only moderate, it could compromise the teaching and learning process. Specifically, limited technology and internet access may lead to disruptions resulting in a catastrophic learning outcome.

Table 2
Teachers' Adaption

		LEARNERS		TEACHERS	
No.	**Indicators**	**Mean**	**Verbal Description**	**Mean**	**Verbal Description**
1	The teachers have access to stable internet connectivity at home during online sessions.	3.71	High Extent	3.72	High Extent
2	The teachers have easy access to gadgets such as smartphones, tablets, laptops and the like.	4.02	High Extent	3.92	High Extent
3	The teachers have technological skills and able to adjust easily in the new normal set-up.	3.80	High Extent	3.70	High Extent
4	The teachers are fully aware and well oriented of the different distance learning modalities, and can make use of them easily.	3.98	High Extent	3.85	High Extent

5	The teachers are knowledgeable enough of the different learning management systems, programs and apps that will help facilitate teaching and learning.	4.03	High Extent	3.63	High Extent
	OVERALL WEIGHTED MEAN	**3.91**	**High Extent**	**3.76**	**High Extent**

Table 2 shows that both learners and teachers perceive the effectiveness of teachers' adaptation as a "High Extent." With mean scores ranging from 3.50 to 4.49, learners (highest mean 4.03) and teachers (highest mean 3.92) agree that educators successfully transitioned to distance learning. Overall weighted average means of 3.91 for learners and 3.76 for teachers signify that staff possess the necessary technological skills, access to gadgets, and knowledge of learning management systems to facilitate instruction.

These findings are reinforced by studies (Scull et al. 2020; Cavanaugh & DeWeese, 2020) highlighting how teachers invested extra time in virtual activities and digital resources. Ultimately, high teacher adaptability ensures a more effective learning process, improving student outcomes and the rapid development of new skills.

Table 3
Delivery of Instruction

		LEARNERS		TEACHERS	
No.	**Indicators**	**Mean**	**Verbal Description**	**Mean**	**Verbal Description**
1	The teachers are able to provide clear instructions during online sessions.	3.87	High Extent	3.80	High Extent
2	The teachers have good content knowledge and have mastery on the subject taught.	4.17	High Extent	4.20	High Extent
3	The teachers can easily review previous topics and relate new topics during online sessions.	4.10	High Extent	3.94	High Extent
4	The teachers make subject matter more interesting using quality infographic aids with integration of technology such as PPT, CANVA, and the like.	4.12	High Extent	3.88	High Extent
5	The teacher provides meaningful and analytical questions in the module and during online classes.	3.94	High Extent	3.68	High Extent
	OVERALL WEIGHTED MEAN	**4.04**	**High Extent**	**3.90**	**High Extent**

Table 3 shows that both groups perceive the delivery of instruction as a "High Extent" of effectiveness. With mean scores between 3.50 – 4.49, learners (highest mean 4.17) and teachers

(highest mean 4.20) agree that instruction remained excellent despite the unconventional setup. General weighted average means of 3.90 for learners and 4.04 for teachers imply that educators successfully provided clear instructions, demonstrated strong content knowledge, and used technology like PPT and Canva to create engaging, analytical lessons.

These findings align with research by Gunawardena & Boverie (1992) and Omoregie (1997), which link effective delivery and instructor preparation to higher student satisfaction and engagement. High effectiveness in delivery helps students better understand the learning process, ultimately leading to a substantial increase in overall lesson effectiveness.

Table 4

Accessibility of Learning Materials

No.	Indicators	LEARNERS		TEACHERS	
		Mean	**Verbal Description**	**Mean**	**Verbal Description**
1	The Self- Learning materials (Modules) are accessible and are easy to follow and understand.	3.45	Moderate Extent	3.65	High Extent
2	The school makes full use of Open Educational Resources (like DepEd commons and Google Classroom) for teaching and learning platform.	4.04	High Extent	3.83	High Extent
3	E-copies of learning materials are also provided in case learners are not able to acquire the modules.	3.78	High Extent	4.03	High Extent
	OVERALL WEIGHTED MEAN	**3.76**	**High Extent**	**3.84**	**High Extent**

As presented in Table 4, the general weighted average mean of the learners' perception on distance learning in terms of teachers' adaptation was 3.76 and, on the teachers', perception was 3.84; both having the verbal interpretation of "High Extent". This strongly implies that in terms of accessibility of instruction during the implementation of distance learning as perceived by both respondents, the school makes full use of Open Educational Resources (like DepEd commons and Google Classroom) for teaching and learning platform, also, e-copies of learning materials were provided in case learners are not able to acquire the modules. Finally, in general, the self- learning materials (Modules) are accessible and are easy to follow and understand.

This implies that there is high extent on the effectiveness of distance learning in terms of accessibility of learning materials. Online learning has various advantages such as low cost, following the latest developments, freedom of choosing the needed teaching materials, can be accessed from anywhere and anytime, and is universal (Hamid et al., 2020).

Table 5
Learning Assessment

No.	Items	LEARNERS Mean	LEARNERS Verbal Description	TEACHERS Mean	TEACHERS Verbal Description
1	Formative and Summative assessments are utilized using online platform like Google classroom and Facebook messenger.	4.16	High Extent	4.17	High Extent
2	Written outputs are submitted through online platforms like Google classroom and Facebook messenger.	4.37	High Extent	4.29	High Extent
3	Performance outputs are submitted through online platforms like Google classroom and Facebook messenger.	4.31	High Extent	4.30	High Extent
	OVERALL WEIGHTED MEAN	**4.28**	**High Extent**	**4.25**	**High Extent**

Table 5 shows that the general weighted average mean of the learners' perception on distance learning in terms of teachers' adaptation was 4.28 and the teachers' perception was 4.25, both having the verbal interpretation of "High Extent." This strongly implies that Formative and Summative assessments, as well as written and performance outputs, are effectively utilized and submitted through online platforms like Google classroom and Facebook messenger. Consequently, the effectiveness of distance learning is evident in terms of learning assessment.

While online solutions are available, universities remain concerned about the integrity and fairness of evaluating learning objectives (Hamid et al., 2020). To address this, instructors use rubrics to guide online discussion and specify the level of critique and analysis required (Baker, 2011; Gilbert & Dabbagh, 2005). Ultimately, well-designed exams foster active learning and long-term memory, while the evolving discourse serves as a useful record of student understanding and provides clear evidence of learning.

Table 6
Significant difference between the perceptions of the two groups of respondents

GROUP	Number of Respondents	Mean	Computed t VALUE	t TABULAR	Interpretation
Learners	150	109.09	4.22	1.97	Significant
Teachers	105	103.58			

Table 6 reveals a significant difference between the perceptions of the two groups regarding the effectiveness of distance learning, as the computed t-value of 4.22 far exceeded the t-tabular value of 1.97, leading to the acceptance of the null hypothesis. This divergence suggests that while students generally view distance learning as effective, teachers maintain more mixed or critical opinions. Such a gap in perception is critical, as a teacher's expectations and influence directly impact student academic performance and achievement.

Furthermore, the sustainability of online education relies heavily on both teacher and learner acceptance. Teachers must analyze "best practices" and "training" to improve delivery, while awareness programs may be necessary to address student concerns regarding the validity of online degrees. Ultimately, because teachers and learners perceive efficiency differently, these conflicting views may disrupt the teaching and learning process in the new normal.

Table 7
Challenges faced by the Learners in Distance learning

		LEARNERS	
No.	**Indicator**	**Mean**	**Verbal Description**
1	Unstable/ Poor internet connectivity and data usage.	3.04	Sometimes
2	Limited access in learning resources due to poor internet connectivity or data usage.	2.75	Sometimes
3	Information overload and too many activities/ tasks to do.	3.19	Sometimes
4	Finds learning inefficient compared during face-to-face set-up.	2.91	Sometimes
5	Teachers are not always available for consultation.	2.02	Rarely
6	Having difficulties coping up in the lessons because of home chores/ responsibilities.	3.11	Sometimes
7	Poor learning environment and not having study area affects learning performance.	2.95	Sometimes
8	Parents/ Guardians are not able to provide assistance.	2.44	Rarely
9	Family problems such as financial related, fights, and the like issues affect academic performance.	2.62	Sometimes
10	The new teaching and learning process (Distance Learning) had caused mental and health issues.	2.98	Sometimes
	OVERALL WEIGHTED MEAN	**2.80**	**Sometimes**

Table 7 details the challenges faced by learners in the new normal where the overall weighted mean of 2.80 indicates these issues are sometimes experienced. Individual indicators ranged from a high of 3.19 to a low of 2.02, with most falling under “Sometimes” and others, such as “Teachers are not always available for consultation” and “Parents/Guardians are not able to provide assistance,” interpreted as “Rarely.” This suggests that while obstacles are occasionally present and difficult to deal with, learners can generally cope and access lessons to improve their understanding.

Research by Copeland et al. (2021), Suryaman et al. (2020), and Kapasia et al. (2020) supports these findings, noting that the pandemic caused significant disruptions including anxiety, poor internet service, and lack of technology mastery. Although the data shows these challenges are at a moderate or low extent, they still impact the effectiveness of remote learning. Therefore, these flaws should be addressed and rectified to prevent them from impairing the overall quality of education.

Table 8
Challenges faced by the Teachers in Distance Learning

Indicators		TEACHERS	
No.	**Items**	**Mean**	**Verbal Description**
1	Unstable/ Poor internet connectivity and data usage.	3.40	Sometimes
2	Have difficulties communicating with learners and parents as well due to their lack of connectivity	3.64	Very Often
3	Having problems in grading due to large number of learners who submits/ finishes their tasks and outputs late.	3.75	Very Often
4	Learning is not genuine. Thus, making it hard to validate learners' outputs and performances genuineness.	3.43	Sometimes
5	Monitoring, checking, and recording needs extensive efforts and is very time consuming.	3.77	Very Often
6	Other tasks/ responsibilities affects teaching performance.	3.72	Very Often
7	Family/ personal problems such as financial related, fights, and the like issues affect teaching performance.	2.89	Sometimes
8	The new teaching and learning process (Distance Learning) had caused mental and health issues.	3.35	Sometimes
	OVERALL WEIGHTED MEAN	**3.49**	**Sometimes**

Table 8 presents the challenges faced by teachers in distance learning, where the overall weighted mean of 3.49 indicates these issues are sometimes experienced. While some indicators were interpreted as "Sometimes", others—specifically the second, third, fifth, and sixth indicators—were experienced very often, with means ranging from 3.64 to 3.77. This implies that teachers frequently face difficulties communicating with learners and parents due to a lack of connectivity, and encounter problems with grading because many students submit tasks late. Consequently, monitoring, checking, and recording require extensive efforts and are very time-consuming.

Supporting research by Fauzi et al. (2020), Mailizar et al. (2020), and Rasmitadila et al. (2020) highlights technical barriers, lack of student participation, and issues with planning and evaluation. These challenges in distance education undoubtedly impact the teaching and learning process. Although these obstacles are not severe, they should be addressed and solutions devised; otherwise, the quality of schooling may deteriorate over time, and learning methods may prove ineffective.

DISCUSSIONS

The findings indicate that Alternative Delivery Mode (ADM) is generally effective in ensuring continuity of education. High ratings in teacher adaptation, instructional delivery, accessibility of materials, and learning assessment suggest that schools have successfully institutionalized flexible learning strategies.

However, the moderate rating in learner adaptation implies that students may require stronger support systems to enhance independent learning skills and self-regulation.

The significant difference between learners' and teachers' perceptions further suggests varying experiences in ADM implementation, possibly influenced by workload, expectations, and access to resources.

The challenges identified particularly connectivity issues, delayed submissions, monitoring difficulties, and psychosocial concerns highlight the need for strengthened institutional mechanisms. Sustainable ADM implementation requires continuous professional development for teachers, improved assessment frameworks, enhanced technological infrastructure, and collaborative engagement among stakeholders.

Overall, ADM remains a viable and flexible educational strategy. Nevertheless, long-term success depends on systematic improvements, responsive policy adjustments, and sustained support for both learners and educators.

CONCLUSIONS

Learners have limited access to the internet and gadgets, and they change their learning through distant learning in a moderate extent. Learners were able to do and complete online and module assignments independently, as well as gain flexibility and self-discipline; however, teachers believed they did so to a limited extent. Both agreed that distant learning is quite effective in terms of instructor adaptation, as teachers are clearly more adaptable to new learning environments. They also agreed that distance learning is beneficial in delivering education, and that assessing students via various online platforms is effective.

Opinions on the effectiveness of distance learning varied significantly. Students think distance learning is effective, but teachers think it is not. These differing perspectives on teaching and learning could have an impact on the process, as the teacher's influence, ideas, and expectations of his or her students' ability have an impact on student academic performance and achievements.

The learners and teachers submitted a number of issues. Students faced unpredictable internet connectivity, data utilization, information overload, and family obligations such as chores and financial difficulties. Teachers find distance learning inefficient compared to face-to-face setups and have problems grading owing to a lack of connectivity and large numbers of learners. Validating the authenticity of learners' outputs demands a lot of effort and time. Mental and physical health difficulties had emerged, and teachers had the most difficulties incorporating distant learning.

The results suggest that distance learning can be effective, but only when there are enough resources, institutional support, and perceptions of teachers and learners from the perspective of access and equity in education, technology integration, and teacher adaptation models. The study locates the findings within these theoretical perspectives to contribute to a deeper understanding of how structural conditions and belief systems interact in shaping the effectiveness of alternative delivery modes.

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Declaration of the Use of AI

During the preparation of this manuscript, the authors used Gemini Ai to help with vocabulary and polishing the draft for IMRAD format. The tool was used solely to check grammar and overall clarity. The authors reviewed and revised the output as necessary and take full responsibility for the content of the manuscript.

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REFERENCES

Journal

Ahmad F. Z., Aeng M. (2019). The Effectiveness of Online Learning with Facilitation Method. Procedia Computer Science. Volume 161, 2019, Pages 32-40, ISSN 1877-0509. Lifted from: https://doi.org/10.1016/j.procs.2019.11.096

Al-Karaki, J. N., Ababneh, N., Hamid, Y., & Gawanmeh, A. (2021). Evaluating the effectiveness of distance learning in higher education during COVID-19 global crisis: UAE educators' perspectives. *Contemporary Educational Technology, 13*(3), 311. https://doi.org/10.30935/cedtech/10945

Baloran, E. T. , Hernan, J. T., & Taoy, J. S. (2021). Course satisfaction and student engagement in online learning amid COVID-19 pandemic: A structural equation model . *Turkish Online Journal of Distance Education , 22* (4) , 1-12 . https://doi.org/10.17718/tojde.1002721.

Cahapay, M. & Anoba, J.L.(2020). The readiness of teachers on blended learning transition for post COVID-19 period: An assessment using Parallel Mixed Method. *PUPIL: International Journal of Teaching, Education and Learning, 4*(2), 295-316, 2020. https://doi.org/10.20319/pijtel.2020.42.295316

Fauzi, I., & Khusuma, I. H. S. (2020). *Teachers' elementary school in online learning of Covid-19 pandemic conditions*. Jurnal Iqra': Kajian Ilmu Pendidikan, 5(1), 58-70

Hamid, M.A., Isa, S.M. & Kiumarsi, S. (2020). Sustainable tourism practices and business performance from the tour operatorsâ perspectives. *Anatolia*, 1-10, https://doi.org/10.1080/13032917.2020.1830135.

Rasmitadila, R., Widyasari, W., Humaira, M. A., Tambunan, A. R. S., Rachmadtullah, R., & Samsudin, A. (2020). Using Blended Learning Approach (BLA) in Inclusive Education Course: A study investigating teacher students' perception. *International Journal of Emerging Technologies in Learning, 15*(2), 72–85.

Owusu-Agyeman, Y., & Amoakohene, G. (2020). Transnational education delivery in Ghana: examining the benefits, challenges and future prospects. *Pol. Rev. High. Educ., 4*, 135–163. https://doi.org/10.1080/23322969.2020.1774408

Book

Allen, I. E., & Seaman, F. (2010). *Learning demand: Online education in the United States, 2009.* Newburyport, Sloan Consortium Inc

Babbie, E. (1990). *Survey Research Methods*. 2nd Edition, Wadsworth, Belmont.

Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative, and Mixed-Method Approaches (3rd ed.)*. Sage Publications, Inc.

Locatis, C., & Weisburg, M. (1997). *Distributed learning and the internet*. Contemporary Education, 68, 100-103.